## **COVER SHEET**

Responsible Agency: United States Department of Energy, National Nuclear Security Administration

*Title:* Final Site-Wide Environmental Impact Statement for the Y-12 National Security Complex, Anderson County, Tennessee

**Contact:** For additional information on the Final Site-Wide Environmental Impact Statement, write or call:

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Abstract: The National Nuclear Security Administration (NNSA) a separately organized agency within the U.S. Department of Energy (DOE) is responsible for providing the Nation with nuclear weapons and ensuring that those nuclear weapons remain safe, secure, and reliable. As one of the DOE major production facilities, the Y-12 National Security Complex has been DOE's primary site for enriched uranium processing and storage, and one of the manufacturing facilities for maintaining the U.S. nuclear weapons stockpile. In response to the end of the Cold War and changes in the world's political regimes, the emphasis of the U.S. weapons program has shifted dramatically over the past few years from developing and producing new weapons to dismantlement and maintenance of a smaller, enduring stockpile. The Stockpile Stewardship and Management Programmatic Environmental Impact Statement [SSM PEIS], DOE/EIS-0236, issued in September 1996, evaluated alternatives for maintaining the safety and reliability of the nuclear weapons stockpile without underground nuclear testing or production of new-design weapons.

In the SSM PEIS Record of Decision (ROD), DOE decided to maintain the national security missions at the Y-12 National Security Complex, but to downsize Y-12 consistent with reduced requirements. These national security missions include (1) maintaining the capability and capacity to fabricate secondaries, limited life components, and case parts for nuclear response; (2) evaluating components and subsystems returned from the stockpile; (3) storing enriched uranium that is designated for national security purposes; (4) storing depleted uranium and lithium parts; (5) dismantling nuclear weapons secondaries returned from the stockpile; (6) processing uranium and lithium (which includes chemical recovery, purification, and conversion of enriched uranium and lithium to a form suitable for long-term storage and/or further use); and (7) providing support to weapons laboratories.

During the same time period as the SSM PEIS, DOE also prepared the *Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement* [S&D PEIS], DOE/EIS-0229, which was issued in December 1996. This S&D PEIS evaluated alternatives for the long-term storage of fissile material. In the S&D PEIS ROD, DOE decided that Y-12 would also store surplus enriched uranium pending disposition.

This Site-Wide Environmental Impact Statement (SWEIS) analyzes impacts for the overall Y-12 National Security Complex mission. These alternatives include two "No Action" alternatives, the proposed construction of a new or upgraded facility for Y-12's Highly Enriched Uranium (HEU) Storage Mission and a new facility for Y-12's Special Materials Mission. The No Action - Status Quo represents the current level of operations at Y-12 in 1999, but not required levels to meet mission needs because some required operations have not resumed since the 1994 stand-down. The No Action - Status Quo Alternative is not considered reasonable for future Y-12 operations because it would not meet Y-12 mission needs. The No Action - Planning Basis Operations Alternative represents full Y-12 Defense Programs mission operations at required levels. Options considered for storage include a new HEU Materials Facility at one of two candidate sites, and expansion of Building 9215. Three candidate sites are analyzed for a new Special Materials Complex for the Special Materials Mission at Y-12. DOE's preferred alternative (Alternative 4) is to construct and operate a new HEU Materials Facility and a new Special Materials Complex at Y-12. The preferred site for the new HEU Materials Facility is Site A (West Portal Parking Lot). The preferred site for the new Special Materials Complex is Site 1 (northwest of Building 9114 and on the north side of Bear Creek Road).

Included in the SWEIS is an evaluation of impacts on land uses, transportation, socioeconomics, geology and soils, hydrology, biological resources, air quality/noise, site facilities and support activities, waste management, and cultural resources. In addition, environmental justice, and radiological and hazardous chemical impacts during construction and normal operations, and accidents to workers and the public are included in the assessment.

In preparing the Final SWEIS, DOE considered comments received by mail or fax, submitted at public meetings, and transmitted via the Internet. The public comment period on the Draft SWEIS extended from December 22, 2000 to February 23, 2001. During the comment period, public hearings were held in Oak Ridge, Tennessee on January 25, 2001.

The Final Y-12 SWEIS contains revisions and new information in response to comments on the Draft Y-12 SWEIS and technical details disclosed since the Draft SWEIS was issued. These revisions and new information are indicated by a "redline" shading. Appendix G of the Final Y-12 SWEIS contains the comments received during the public review of the Draft Y-12 SWEIS and DOE's responses to these comments.

No sooner than 30 days after issuance of the U.S. Environmental Protection Agency's notice of availability of this SWEIS in the *Federal Register* DOE expects to issue a Record of Decision.